



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/786,472	02/26/2004	Takahiro Ichihara	925-284	9312

23117 7590 05/10/2005

NIXON & VANDERHYE, PC  
1100 N GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201-4714

EXAMINER

BONCK, RODNEY H

ART UNIT	PAPER NUMBER
----------	--------------

3681

DATE MAILED: 05/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



## Office Action Summary

Application No.

10/786,472

Applicant(s)

ICHIHARA ET AL.

Examiner

Rodney H. Bonck

Art Unit

3681

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/26/04 &amp; 6/3/04</u> . | 6) <input type="checkbox"/> Other: _____  |



## **DETAILED ACTION**

The following is a first action on the merits of application Serial No.10/786,472, filed February 26, 2004.

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

Receipt is acknowledged of the Information Disclosure Statements filed February 26, 2004 and June 3, 2004. The cited documents have been considered.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.



Claims 1 and 2 are rejected under 35 U.S.C. 102(a and e) as being anticipated by Iwasa et al.(US 2003/0098624 A1).

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Noting especially Fig. 10 of Iwasa et al., there is disclosed a one-way clutch unit, having a first one-way clutch 66 with a first outer ring 69, a first inner ring 65,70, first engagement members 67 and first balls 71; and a second one-way clutch 83, having a second outer ring 69, a second inner ring 70, second engagement members 67, and second balls 71 (see Fig. 4 for clutch details). An annular recess is provided in the inner periphery of the first inner ring 65,70 (Fig. 10), and one end portion of the second one-way clutch is disposed in the annular recess. The annular recess is provided in the inner periphery of a side of the raceway surface of the first inner ring 65,70 of the first one-way clutch 66.

Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayashi(US 2003/0098216 A1). Noting especially Fig. 4 of Hayashi, there is disclosed a one-way clutch unit, having a first one-way clutch with a first outer ring 69, a first inner ring 67, first engagement members 712 and first balls 702; and a second one-way



Art Unit: 3681

clutch, having a second outer ring 67, a second inner ring 68, second engagement members 711, and second balls 701. An annular recess is provided in the inner periphery of the first inner ring 67, and one end portion of the second one-way clutch is disposed in the annular recess. The annular recess is provided in the inner periphery of a side of the raceway surface of the first inner ring of the first one-way clutch. Note that, since the first and second one-way clutches totally overlap in Hayashi, the annular recess is in the raceway surface, as claimed, and in the engagement surface. In the one-way clutches of Hayashi, the outer ring has the engagement cam surfaces (see Figs. 6A,6B).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to



Art Unit: 3681

consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwasa et al.(US 2003/0098624 A1). In Iwasa et al. the engagement surface rather than the raceway surface of the second one-way clutch is disposed in the recess. As seen in Fig. 4, however, the clutches can be oriented such that the raceway surface of the second clutch is disposed adjacent the first one-way clutch. It would have been obvious to dispose the raceway surface of the second one-way clutch in the recess in the Fig. 10 embodiment because the artisan would have recognized that either orientation of the second one-way clutch would be equivalent. The Iwasa et al. device does not show a curved surface joining the end surface and peripheral surface of the recess or the corresponding surfaces of the second one-way clutch. Noting Fig. 10, however, an overlap is provided between housing 84 and pulley 17. A recess is provided in the pulley receiving a portion of the housing to provide the overlap and reduced axial dimensions. A curved surface is provided joining the end and peripheral surfaces of the recess in the pulley and the corresponding surfaces of housing 84. It would have been obvious to use this same configuration in the recess receiving the second one-way clutch, since the same result would be achieved.



***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Iwasa et al.(US 2003/0098624 A1) or Hayashi(US 2003/0098216 A1) in view of Fujiwara(US 2002/0183147 A1). In the one-way clutches of Iwasa et al. and Hayashi, the outer surface is the cam surface and the inner surface is cylindrical. Fujiwara shows a one-way clutch having the cam surface on the inner ring. It would have been obvious to provide the cam surface on the inner ring in the clutches of Iwasa et al. or Hayashi, since the artisan would have recognized the two clutch types as equivalent.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. JP 2003-166469 A is cited for its showing of overlapped one-way clutches in Figs. 1 and 4.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rodney H. Bonck whose telephone number is (571)



Art Unit: 3681

272-7089. The examiner can normally be reached on Monday-Friday 7:00AM - 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles A. Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Rodney H. Bonck  
Primary Examiner  
Art Unit 3681

rhb  
May 4, 2005